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| APPLICATION NO.            | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-------------|----------------------|---------------------|------------------|
| 09/781,148                 | 02/08/2001  | David Charles Lyons  | 12929.1053US01      | 7450             |
| 23552                      | 7590        | 06/21/2004           | EXAMINER            |                  |
| MERCHANT & GOULD PC        |             |                      | YOON, TAE H         |                  |
| P.O. BOX 2903              |             |                      | ART UNIT            | PAPER NUMBER     |
| MINNEAPOLIS, MN 55402-0903 |             |                      | 1714                |                  |

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/781,148

Applicant(s)

LYONS ET AL.

Examiner

Tae H Yoon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 30 and 32-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30 and 32-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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Exhibits are not considered being prior art, especially without the publication date, and thus Exhibit A and Exhibit B are crossed-out on PTO-1449.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 30 and 32-40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.**

The recited "greater than 0" for the inorganic filler in claim 30 does not have support in the originally filed specification and thus constitute NEW MATTER. Applicant states that each embodiment of the composition disclosed in the specification includes at least some inorganic filler. However, the lowest amount of inorganic fibers seen in table 3 is 3.3 wt.%, and see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976) for choosing a particular range.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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**Claims 30 and 32-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 30 is indefinite whether the recited "about 10 to 40 % by wt." in "about 10 to 40 % by wt. inorganic binder suspended in an aqueous solution" encompasses the weight of water or not. Also, it is unclear whether the recited amount of carrier solvent in claim 30 encompasses the weight of water for suspending said inorganic binder or not. The recited "the inorganic binder is colloidal silica" in claim 40 is confusing and it should be "the inorganic binder suspended in an aqueous solution is colloidal silica".

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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**Claims 30, 32, 33, 35, 36 and 40 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Miyamoto et al (US 5,518,678).**

Miyamoto et al teach a composition comprising zeolite powder, inorganic fiber and inorganic binder in abstract and example 3, and at col. 3, lines 48-55 and col. 5, line 53 to col. 6, line 11. Said example 3 shows 9 parts by weight (9 wt. %) of colloidal silica (45 parts X 20%) and 36 parts of water, however, Miyamoto et al teach 3-10 wt. % of inorganic binder (such as colloidal silica) at col. 3, lines 49-50 which meets the instant 10 % by weight. Thus, the instant invention lacks novelty.

**Claims 30, 32, 33 and 35-40 are rejected under 35 U.S.C. 103(a) as obvious over Miyamoto et al (US 5,518,678).**

The instant invention further recites different amounts of water over Miyamoto et al. However, Miyamoto et al teach adjusting an amount of water at col. 4, lines 4-7. Examples 1 and 3 show 13.5 wt. % and 36 wt.% of water, respectively.

It would have been obvious to one skilled in the art at the time of invention to utilize the instantly claimed amount of water in Miyamoto et al since Miyamoto et al teach employing various amounts of water in order to obtain good extrusion products.

**Claims 30 and 32-40 are rejected under 35 U.S.C. 103(a) as obvious over Miyamoto et al (US 5,518,678) in view of Rancoulle (US 4,951,852) or Andersen et al (US 6,090,195), or further in view of Gnyra (US 5,033,721).**

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The instant invention further recites employing an acrylic polymer over Miyamoto et al who teach various organic binders at col. 3, lines 51-55. However, the instant acrylic polymer is one of the well known organic binders as taught by Rancoulle (col. 3, line 29) and Andersen et al (claim 37). Gnyra teaches that colloidal silica is an aqueous colloid at col. 2, lines 49-50.

It would have been obvious to one skilled in the art at the time of invention to utilize the art well known acrylic polymer of Rancoulle or Andersen et al as an organic binder in Miyamoto et al since Miyamoto et al teach various organic binders and since an acrylic polymer is one of the well known organic binders, and colloidal silica is an aqueous colloid as taught by Gnyra.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tae H Yoon  
Primary Examiner  
Art Unit 1714

THY/June 16, 2004